REMARKS

Entry of the foregoing and reconsideration of the subject application are respectfully requested in light of the amendments above and the comments which follow.

As correctly noted in the Office Action Summary, claims 1-28 were pending. By the present response, claims 1-2, 4-5, 7-14, 16, 22-23, and 25-28 have been amended, claim 3 canceled, and claims 29-33 have been added. At least some of these amendments merely address grammatical issues in the claims. Upon entry of the present response, claims 1-2 and 4-33 remain pending and await further consideration on the merits.

Support for the foregoing amendments can be found, for example, in at least the following locations in the original disclosure: the original claims.

OBJECTION TO THE SPECIFICATION

Paragraphs [0001] and [0043] were objected to for the reasons noted in paragraph 1 of the Official Action. By the present amendments, these objections have been addressed. Specifically, the reference to claim 1 has been removed from paragraph [0001] and the term CNC has been replaced by computer numerically controlled in paragraph [0043]. Withdrawal of the objection is respectfully requested.

CLAIM OBJECTIONS

Claims 12, 16 and 22-23 were objected to by the Examiner. These claims have been amended in a manner that addresses the objections. Withdrawal of the objections is respectfully requested.

CLAIM REJECTIONS UNDER 35 U.S.C. §102

Claims 1-5, 11, 12, 16 and 24-28 stand rejected under 35 U.S.C. §102(a) as being anticipated by U.S. Patent No. 6,265,022 to Fernihough et al. (hereafter "*Fernihough et al.*") on the grounds set forth in paragraph 4 of the Official Action. For at least the reasons noted below, this rejection should be withdrawn.

To anticipate a claim, the reference must teach every element of the claim. See MPEP § 2131. For example, "a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631 (Fed. Cir. 1987). Here, the rejections are traversed because the cited reference does not teach every element of the claim. The following comments on the reference are offered.

Fernihough et al. discloses essentially a method of applying a coating to metal article. The article has cooling holes that must be maintained and may not get filled or reduced in size during the coating. To this end, a fluid flow is passed through the cooling hole while concurrently the surface 7 of the metal article 7a is covered with a mask material 6. The mask material is then solidified to mask material 6a by means of an energy source (see Figures 3a-3c). A cooling hole passage is thus formed through the mask material. The cooling holes are then filled with a plugging material, designated by 6b in Figure 3e. The masking material 6a is removed and the actual coating material 9 is placed on the surface 7 of the metal article 7a (Figure 3g). Finally, the plugging material 6b is removed to leave a cooling hole passage leading through the metal article and the coating 9 (Figure 3h). Masking material and

plugging material are thus used to maintain the cooling hold shape during coating of the article, such that the cooling hole dimensions are not reduced during the coating.

In contrast to *Fernihough et al.*, the method according to our invention of the present claims at issue here is a method for the removal of a coating that is damaged following service of the metal article (in a machine such as a turbine). A coating 8 is removed using the disclosed method, which protects the cooling hole from changing in shape and increasing in size during the removal process. For this, a material, designated here as "mask material" 5, is applied to the cooling hole and thickened using a filler material resulting in the mask material 5a (Figure 3b, 3c). The coating is removed from other portions of the the component and the mask material 5a in the local areas, such as braze joint, a cooling hole, a local part of a coated area or any other area of a gas turbine component which is sensitive to the thermochemical and/or physical removal process, withstands the process of mechanical removal and/or thermochemical removal of the coating (Figure 3e). Finally, the thickened mask material 5a is removed from the local area leaving a stripped material article having an intact cooling hole 4 (Figure 3f).

The two methods differ in that *Fernihough et al.* discloses a method of applying a coating and protecting the cooling hole such that it does not get smaller in a coating process and effectively maintains the integrity of the cooling hole through the coating. A masking material is used in *Fernihough et al.* in order to produce the "plug" for the cooling hole through a coating on the article. On the other hand, the method according to the claims at issue here removes the coating and protects the cooling holes from getting larger and wider while effectively stripping the metal article leaving a base material of the article with a cooling hole through the metal base

material only. Here, a masking material is used to protect the cooling hole in the base material while the coating is removed from the article.

In light of at least this difference, Applicant respectfully submits that an anticipatory rejection is improper since *Fernihough et al.* reference does not disclose the invention as claimed. Withdrawal of the rejection is respectfully requested.

Further, claim 3 has been canceled and the rejection of that claim has been obviated.

CLAIM REJECTIONS UNDER 35 U.S.C. §103

Claims 6, 13-15 and 17-23 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Fernihough et al.* on the grounds set forth in paragraph 7 of the Official Action. Claims 6, 13-15 and 17-23 each depend directly or indirectly from independent claim 1 discussed above and the disclosure in *Fernihough et al.* does not disclose, teach or suggest the present claims for at least the same reasons. Withdrawal of the rejection is respectfully requested.

NEW CLAIMS

New claims 29 to 33 have been added. These claims contain additional features of the presently claimed invention. These claims contain material present in the original claims, but are now presented in separate dependent claims to facilitate examination.

CONCLUSION

From the foregoing, further and favorable action in the form of a Notice of Allowance is earnestly solicited. Should the Examiner feel that any issues remain, it is requested that the undersigned be contacted so that any such issues may be adequately addressed and prosecution of the instant application expedited.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

Date: December 20, 2004

By: _____
Jeffrey G. Killian
Registration No. 50,891

P.O. Box 1404
Alexandria, Virginia 22313-1404
(703) 836-6620